

AMENDMENTS TO THE CLAIMS

Claim 1 (Original): Method for correcting speed feedback in a synchronous permanent-magnet motor, **characterized** in that the averages of speed reference and speed measurement for both downward and upward constant-speed travel are calculated, whereupon the gain and zero factors are identified and the measured speed measurement value is corrected to the correct value.

Claim 2 (Original): Method according to claim 1, **characterized** in that the above-mentioned averages of speed are calculated using the sum of the speeds and the number of samples.

Claim 3 (Original): Method according to claim 2, **characterized** in that a new speed gain factor and speed zero factor are calculated.

Claim 4 (Original): Method according to claim 3, **characterized** in that the aforesaid speed gain factors and speed zero factors are updated by a forgetting factor.

Claim 5 (Original): Method according to claim 3, **characterized** in that the aforesaid speed gain factors and speed zero factors are updated by an exponential forgetting factor.

Claim 6 (Currently Amended): Method according to claim 4 ~~or 5~~, **characterized** in that, by applying the aforesaid forgetting factor, measurement samples of recent history are given more weight as compared with later measurement samples.

Claim 7 (Currently Amended): Method according to ~~any one of the preceding claims~~claim 1, **characterized** in that the method is adaptive.

Claim 8 (Currently Amended): Method according to ~~any one of the preceding claims~~claim 1, **characterized** in that the synchronous permanent-magnet motor of the method is used as an elevator drive machine.